

IN THE CLAIMS:

A version of the pending claims are presented having necessary markings to show the changes made and the current status of all pending claims in compliance with 37 C.F.R. § 1.121.

1-9. (Cancelled)

10. (Currently Amended) A drug delivery device comprising:

(i) a housing;

(ii) a means for generating a force capable of pushing a drug from a packaging into a human or animal body;

(iii) a lower barrel (30) at the end remote from the upper barrel which includes a means (20) for transmitting said force to push the drug (16) from the packaging (18) into the human or animal body, a sliding piston (48) and a means (22) for slidably receiving a packaged drug (100) configured such that a packaged drug attached thereto can slide within the device and act against said piston in the device to prime it;

(iv) a means for triggering the device wherein said force generating means and said force transmitting means are configured to push the drug from the packaging into the human or animal body at a velocity of less than 20 m/s;

(v) an upper barrel, at one end of the device which houses the force generating means;

(vi) said lower barrel being in operative communication with said upper barrel and said packaged drug; and

(vii) ~~A drug delivery device as claimed in claim 7 further comprising~~ a resilient means below or otherwise in association with the drive pin or other elements to ensure the drive pin is withdrawn after use[.]; and

(viii) wherein the packaged drug is slidably disposed in the lower barrel and comprises a packaging containing a drug, said packaging comprising a two-piece housing having a channel running there through in which is disposed a drive pin or other element, a skin piercing means

and the drug; said two-piece housing further comprising i) a region allowing the packaged drug to be slidably mounted to the drug delivery device at receiving means; and ii) an end adapted to engage and tension the skin.

11-14. (Cancelled)

15. (Currently Amended) A drug delivery device comprising:

(i) a housing;

(ii) a means for generating a force capable of pushing a drug from a packaging into a human or animal body;

(iii) a lower barrel (30) at the end remote from the upper barrel which includes a means (20) for transmitting said force to push the drug (16) from the packaging (18) into the human or animal body, a sliding piston (48) and a means (22) for slidably receiving a packaged drug (100) configured such that a packaged drug attached thereto can slide within the device and act against said piston in the device to prime it; and

(iv) a means for triggering the device wherein said force generating means and said force transmitting means are configured to push the drug from the packaging into the human or animal body at a velocity of less than 20 m/s;

(v) the means for generating the force capable of pushing the drug is a spring; and

A drug deliver device as claimed in claim 11 further comprising (vi) a spring follower.

16-19. (Cancelled)

20. (Original) A drug delivery device as claimed in claim 15 wherein the means for transmitting the force comprises a substantially conical end and the spring follower has a correspondingly shaped recess in the underside thereof.

21. (Currently Amended) A drug delivery device comprising:

(i) a housing;

(ii) a means for generating a force capable of pushing a drug from a packaging into a human or animal body;

(iii) a lower barrel (30) at the end remote from the upper barrel which includes a means (20) for transmitting said force to push the drug (16) from the packaging (18) into the human or animal body, a sliding piston (48) and a means (22) for slidably receiving a packaged drug (100) configured such that a packaged drug attached thereto can slide within the device and act against said piston in the device to prime it;

(iv) a means for triggering the device wherein said force generating means and said force transmitting means are configured to push the drug from the packaging into the human or animal body at a velocity of less than 20 m/s;

(v) an upper barrel, at one end of the device which houses the force generating means;

(vi) said lower barrel being in operative communication with said upper barrel and said packaged drug;

(vii) wherein the packaged drug is slidably disposed in the lower barrel and comprises a packaging containing a drug, said packaging comprising a two-piece housing having a channel running there through in which is disposed a drive pin or other element, a skin piercing means and the drug; said two-piece housing further comprising i) a region allowing the packaged drug to be slidably mounted to the drug delivery device at receiving means; and ii) an end adapted to engage and tension the skin; and

(viii) A drug delivery device as claimed in claim 16 wherein the packaged drug and striker are slidably mounted in the device such that the device can be primed by pushing the device against the skin.

22. (Currently Amended) A drug delivery device comprising:

(i) a housing;

(ii) a means for generating a force capable of pushing a drug from a packaging into a human or animal body;

(iii) a lower barrel (30) at the end remote from the upper barrel which includes a means (20) for transmitting said force to push the drug (16) from the packaging (18) into the human or animal body, a sliding piston (48) and a means (22) for slidably receiving a packaged drug (100) configured such that a packaged drug attached thereto can slide within the device and act against said piston in the device to prime it;

(iv) a means for triggering the device wherein said force generating means and said force transmitting means are configured to push the drug from the packaging into the human or animal body at a velocity of less than 20 m/s;

(v) an upper barrel, at one end of the device which houses the force generating means;

(vi) a lower barrel, said lower barrel being in operative communication with said upper barrel and said packaged drug; and

(vii) wherein the packaged drug is slidably disposed in the lower barrel and comprises a packaging containing a drug, said packaging comprising a two-piece housing having a channel running there through in which is disposed a drive pin or other element, a skin piercing means and the drug; said two-piece housing further comprising i) a region allowing the packaged drug to be slidably mounted to the drug delivery device at receiving means; and ii) an end adapted to engage and tension the skin; and

(viii) wherein the means for transmitting the force is a striker;

(ix) wherein a region of the striker is shaped to fit a correspondingly shaped surface in a wall separating the upper and lower barrels defined by the housing such that the striker is aligned to strike the drive pin or other element in the packaged drug on actuation

(x) wherein the striker comprises a substantially frustoconical shoulder region which engages a substantially frustoconical surface in the wall separating the upper and lower barrels defined by the housing; and

(xi) A drug delivery device as claimed in claim 19 wherein the sliding piston has an aperture therein and the device comprises a slewing spring and the striker, all housed in the lower barrel, the device being triggered by the sliding of the piston up the lower barrel until the shoulder region of the striker engages the shaped surface and aligns the striker with the aperture in the sliding piston such that the striker moves down the aperture under the action of the force generating means.

23. (Original) A drug delivery device as claimed in claim 22 wherein the device is primed and actuated by a single action.

24. (Original) A device as claimed in claim 23 wherein pushing the packaged drug up the lower barrel with sufficient force causes the device to be primed and actuated.

25. (Original) A device as claimed in claim 23 wherein the action of pushing the packaged drug up the lower barrel with sufficient force causes the sliding piston to move up the lower barrel thereby causing the striker to be pushed up the lower barrel out of a first position in which it is not axially aligned with the aperture in the sliding piston which operatively communicates with the packaged drug and at the same time acts on a spring follower in the upper barrel causing the spring to be compressed and the device primed such that when the required delivery force is generated the striker is axially aligned with the aperture of the sliding piston and is thus actuated such that the spring acts through the spring follower and striker upon the drive pin or a like element in the packaged drug to deliver the drug into the human or animal body.

26-43. (Cancelled)

44. (Currently Amended) A packaged drug, for use with a drug delivery device, comprising a packaging containing a drug, said packaging comprising a housing having a channel running there through in which is disposed a drive pin or other element, a skin piercing means, and the drug, said housing further comprising i) a region allowing the packaged drug to be slidably mounted to the drug delivery device; and ii) an end adapted to engage and tension the skin; and

~~A packaged drug as claimed in claim 38~~ further comprising a resilient means below the drive pin head to ensure the drive pin is withdrawn after use.

45-52. (Cancelled)

53. (Currently Amended) A packaged drug, for use with a drug delivery device, comprising a packaging containing a drug, said packaging comprising a housing having a channel running there through in which is disposed a drive pin or other element, a skin piercing means, and the drug, said housing further comprising i) a region allowing the packaged drug to be slidably mounted to the drug delivery device; and ii) an end adapted to engage and tension the skin; and

~~A packaged drug as claimed in claim 38~~ further comprising a receptacle having a breakable base and being sealed by the drive pin or other element which drive pin or other element comprises an elongate body and a plurality of flexible arms.

54. (Original) A packaged drug as claimed in claim 53 in which the arms of said element, in use, ride over one or more ramped surfaces provided on the housing such that they are displaced and/or break away from the elongate body so the elongate body of the drive pin can travel down the receptacle, causing the drug to be expelled from the base of the receptacle which breaks under the pressure exerted thereon.

55. (Original) A packaged drug as claimed in claim 53 further comprising a pioneer projectile below the base of the receptacle.

56. (Currently Amended) A packaged drug, for use with a drug delivery device, comprising a packaging containing a drug, said packaging comprising a housing having a channel running there through in which is disposed a drive pin or other element, a skin piercing means, and the drug, said housing further comprising i) a region allowing the packaged drug to be slidably mounted to the drug delivery device; and ii) an end adapted to engage and tension the skin; and

~~A packaged drug as claimed in claim 38 wherein a placebo is disposed behind the drug.~~

57-59. (Cancelled)